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**CLAIMS**

What is claimed is:

1. An assembly for use in an operating room, the assembly for connecting between two electrical components, the assembly comprising at least one electrical conductor electrically connected between the two components for establishing an electrical current path between the two components, and an electrical conductive shield extending around at least a portion of the conductor for establishing an additional path for transmitting any electrical noise generated during the operation of the components.
2. The assembly of claim 1 wherein one end of the shield is electrically connected to one of the components and wherein the other end of the shield is not connected to either component.
3. The assembly of claim 2 wherein the additional path transmits the electrical noise to the one component.
4. The assembly of claim 2 wherein the one end of the shield is connected to ground at the one component to dissipate the electrical noise.
5. The assembly of claim 2 wherein the electrical noise is transmitted through the shield to a ground connection at the one component.
6. The assembly of claim 2 further comprising a connector connected to the conductor and adapted to engage the one component to electrically connect the conductor to the one component.

7. The assembly of claim 6 wherein the connector is also connected to the shield for electrically connecting the shield to ground at the one component.

8. The assembly of claim 7 wherein the connector establishes separate electrical conductive paths for the current flowing through the conductor and the electrical noise flowing through the shield.

9. The assembly of claim 6 wherein the connector is connected to one end of the conductor, and further comprising another connector connected to the other end of the conductor and adapted to engage the other component to electrically connect the conductor to the other component.

10. The assembly of claim 1 further comprising one connector connected to one end of the conductor and adapted to engage one component to electrically connect the conductor to the one component, and another connector connected to the other end of the conductor and adapted to engage the other component to electrically connect the conductor to the other component.

11. The assembly of claim 10 wherein one end of the shield is connected to the one connector, and wherein the other end of the shield extends proximately to the other connector and is not connected to the other connector.

12. The assembly of claim 11 wherein separate electrical conductive paths are established in the one connector for the

current flowing through the conductor and for any electrical noise flowing through the shield.

13. The assembly of claim 12 wherein the shield is connected to ground at the one component to dissipate the electrical noise.

14. A method for connecting between an electrical surgical instrument (first component) to an electrical power supply (second component), the method comprising establishing an electrical current path between the instrument and the supply, and establishing an additional path for transmitting any electrical noise generated during the operation of the components.

15. The method of claim 14 wherein the additional path is electrically isolated from the electric current path.

16. The method of claim 14 wherein the additional path is connected to ground at the other component.

17. The method of claim 14 wherein the first-mentioned step of establishing comprises connecting at least one electrical conductor between the two components.

18. The method of claim 17 wherein the second-mentioned step of establishing comprises extending an electrical conductive shield around at least a portion of the conductor, and electrically connecting one end of the shield to one of the components, wherein the other end of the shield is not connected to either component.

19. The method of claim 18 wherein the electrical noise is transmitted to the one component via the shield.

20. The method of claim 19 further comprising connecting the one end of the shield to ground at the one component to dissipate the electrical noise.

21. The method of claim 18 further comprising directing the electrical noise through the shield to a ground connection at the one component.

22. The method of claim 18 further comprising connecting a connector to the conductor, and engaging the connector with the one component to electrically connect the conductor to the one component so that the connector forms a portion of the electrical current path.

23. The method of claim 22 further comprising connecting the connector to the shield for electrically connecting the shield to ground at the one component so that the shield forms a portion of the additional path.

24. The method of claim 22 wherein the connector is connected to one end of the conductor and further comprising connecting another connector to the other end of the conductor, and engaging the other connector with the other component to electrically connect the conductor to the other component so that the other connector forms a portion of the electrical current path.

25. The method of claim 17 further comprising connecting one connector to one end of the conductor, engaging the one connector with the one component to electrically connect the conductor to the one component, connecting another connector to the other end of the conductor, and engaging the other connector with the other component to electrically connect the conductor to the other component, wherein the connectors each form a portion of the electrical current path.

26. The method of claim 25 further comprising connecting one end of the shield to the one connector, and extending the other end of the shield proximately to the other connector without the shield being connected to the other connector.

27. The method of claim 26 further comprising establishing separate electrical conductive paths in the one connector for the current flowing through the conductor and for the electrical noise flowing through the shield so that the connector forms a portion of the electrical current path and a portion of the additional path.

28. An operating room assembly for connecting between two electrical components used in a surgical environment, the assembly comprising means for establishing an electrical current path between the two components, and means for establishing an additional path for transmitting any electrical noise generated during the operation of the components.

29. The assembly of claim 28 wherein the additional path is electrically isolated from the electric current path.

30. The assembly of claim 28 wherein the additional path is connected to ground at one of the components to dissipate the electrical noise.

31. The assembly of claim 28 wherein the first-mentioned means comprises at least one electrical conductor electrically connected between the two components.

32. The assembly of claim 31 wherein the second-mentioned means comprises an electrical conductive shield extending around at least a portion of the conductor, with one end of the shield electrically connected to one of the components, and wherein the other end of the shield is not connected to either component.

33. The assembly of claim 32 further comprising a connector connected to the conductor and adapted to engage the one component to electrically connect the conductor to the one component.

34. The assembly of claim 33 wherein the connector is also connected to the shield for electrically connecting the shield to ground at the one component.

35. The assembly of claim 34 wherein the connector establishes separate electrical conductive paths for the current flowing through the conductor and any electrical noise flowing through the shield.

36. The assembly of claim 33 wherein the connector is connected to one end of the conductor and further comprising another

connector connected to the other end of the conductor and adapted to engage the other component to electrically connect the conductor to the other component.

37. The assembly of claim 32 further comprising one connector connected to one end of the conductor and adapted to engage one component to electrically connect the conductor to the one component, and another connector connected to the other end of the conductor and adapted to engage the other component to electrically connect the conductor to the other component.

38. The assembly of claim 37 wherein one end of the shield is connected to the one connector, and wherein the other end of the shield extends proximately to the other connector and is not connected to the other connector.

39. The assembly of claim 38 wherein separate electrical conductive paths are established in the one connector for the current flowing through the conductor and for any electrical noise flowing through the shield.

40. The assembly of claim 38 wherein the shield is connected to ground at the one component to dissipate the electrical noise.